

Appl. No. 09/672,007
Amdt. Dated June 23, 2004
Reply to Office action of March 23, 2004
Attorney Docket No. P12030-US1
EUS/J/P/04-2023

REMARKS/ARGUMENTS

1.) Amendments

Claims 1, 13 and 17 have been amended, claims 6 and 18 have been cancelled, and claim 19 has been added. Accordingly, claims 1-5, 7-17 and 19 are pending in the application. Favorable reconsideration of the application is respectfully requested in view of the foregoing amendments and the following remarks.

2.) Claim Objections

The Examiner objected to claims 1, 17 and 18 for various informalities. The Applicant has amended claims 1 and 17 to correct the informalities, and claim 18 has been cancelled. The Applicant, therefore, respectfully requests that the Examiner withdraw the objections to claims 1 and 17.

3.) Claim Rejections – 35 USC §112

The Examiner rejected claims 1-14, 17 and 18 as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. The Examiner stated particular reasons for the rejection of claims 1, 13, 17 and 18, while claims 2-12 and 14 were apparently rejected due to their dependence from claims 1 and 13, respectively. In accordance with the Examiner's stated reasons for indefiniteness, the Applicant has amended claims 1, 13 and 17 to more particularly point out and distinctly claim the subject matter that Applicants regards as the invention, and claim 18 has been cancelled. The Applicant, therefore, respectfully

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requests that the Examiner withdraw the rejection of claims 1-14 and 17 as being indefinite.

4.) Allowable Subject Matter

The Examiner objected to claims 5, 6, 8-10, 12, 14 and 16, but indicated those claims would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, and to include all of the limitations of their base claim and any intervening claims. The Applicant thanks the Examiner for the indication of allowable subject matter.

The Applicant has amended claim 1 to overcome the Examiner's rejection under §112, and to include the limitations of claim 6. Accordingly, claim 1 is now allowable. Furthermore, whereas claims 2-5, 7-10 and 12 are dependent from claim 1, and include the limitations thereof, those claims are also now allowable. The Applicant, therefore, respectfully requests that the Examiner withdraw the rejection of claims 1-5, 7-10 and 12.

With respect to the Examiner's indication that claims 14 and 16 would be allowable if rewritten in independent form, the Applicant believes the base claims 13 and 15, respectively, are patentable over the cited art and, therefore, the Applicant declines to so amend claims 14 and 16.

5.) Claim Rejections – 35 U.S.C. §103(a)

The Examiner rejected claims 1-4, 7, 10, 11, 15 and 17 as being unpatentable over Applicant's admitted prior art in view of Raith (WO 97/15131), and further in view of

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Jones (GB 2,318,252), and rejected claim 13 as being unpatentable over Applicants admitted prior art in view of Raith and further in view of Alamouti (2003/0133516). With respect to the rejection of claim 1, it has been amended to include the allowable subject matter of claim 6 and, therefore, the Examiner's rejection under §103 is now moot. Furthermore, whereas claims 2-4, 7 and 10 are dependent from claim 1, and include the limitations thereof, the Examiner's rejection under §103 is moot. The Applicant, therefore, respectfully requests that the Examiner withdraw the rejection under §103 of claims 1-4, 7 and 10. With respect to claims 11, 13, 15 and 17, the Applicant traverses the rejections.

Claims 11, 15 and 17

With respect to claims 11, 15 and 17, the claimed invention relates to channel frequency hopping systems or methods having four different channel coding schemes. Three of the channel coding schemes append redundant information to the transmitted data while the fourth does not. The coding scheme is selected adaptive to the quality of the radio channel and may be changed during communication. In particular, when the fourth coding scheme is used, the channel is switched from a frequency hopping to a non-frequency hopping channel. The Examiner, recognizing that Raith fails to disclose the use of non-frequency hopping channels with a channel coding scheme that doesn't append redundant information to the transmitted data, has looked to the teachings of Jones. Jones, however, doesn't cure the deficiency of Raith.

The Examiner notes that Jones discloses moving radio connections that have bad quality from a non frequency-hopping channel to a frequency-hopping channel. Jones, however, teaches that frequency hopping is used to enhance quality for all

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connections, while for some connections enhanced performance is not needed and they could be assigned to a non-hopping channel (see page 7, lines 30 -34). Moreover, Jones describes a radio system in which there are some channels that must be non-hopping (see page 6, line 32 -page 8, line 3), and it is implicit that these channels are desired to be taken into use as transmission must occur in all timeslots on such a radio bearer (see page 7, line 37 to page 8, line 1). Therefore, applying the teachings of Jones in a system where all channels may be frequency hopping, then frequency hopping should be applied for all channels in order to enhance the quality.

In contrast to Jones, the Applicant's invention as recited in claims 11, 15 and 17 is characterized by non-frequency hopping channels that are assigned to radio links when using a coding scheme that does not append redundant information to the transmitted data. The Applicant's invention is based on the insight that for a channel coding scheme that does not append redundant information to the transmitted data, the quality is improved by use of a non-hopping channel, which Jones clearly teaches away from. Accordingly, the invention in claims 11, 15 and 17 is not obvious over Raith in view of Jones. Furthermore, claim 19, which has been added in this response, includes limitations analogous to those of claims 1, 11, 15 and 17 and, therefore, it is also not obvious over Raith in view of Jones.

Claim 13

With respect to claim 13, the Examiner, recognizing that Raith fails to disclose the use of a channel coding scheme that doesn't append redundant information to the transmitted data when using diversity transmission, has looked to the teachings of

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Alamouti. The Examiner simply states that Alamouti discloses diversity transmission, and concludes that it would have been obvious to combine the teachings of Raith and Alamouti to arrive at Applicant's claimed invention. The Examiner has not pointed to any teaching or suggestion in Raith or Alamouti to combine their teachings and, therefore, the Examiner has failed to establish a *prima facie* case of obvious of claim 13. The Applicant, therefore, respectfully requests that the Examiner withdraw the rejection of claim 13 as being obvious over Raith in view of Alamouti.

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CONCLUSION

In view of the foregoing amendments and remarks, the Applicant believes all of the claims currently pending in the Application to be in a condition for allowance. The Applicant, therefore, respectfully requests that the Examiner withdraw all rejections and issue a Notice of Allowance for claims 1-5, 7-17 and 19.

The Applicant requests a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,



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